

Subject index for papers in Volume 33

Each index entry below is accompanied by an author's name and a page number; the author index contains the title of the paper and the names of coauthors, if any. Communications are identified by (C).

Subject	Author	Page			
<i>Algorithms</i>					
Preserving the integrity of cyclic-redundancy checks when protected text is intentionally altered	Irvin	618			
<i>Analytical methods</i>					
Dependability evaluation of a class of multi-loop topologies for local area networks	Smith	511			
Statistical properties of selected recording codes	Howell	60			
<i>APL programs</i>					
Fault-simulation programs for integrated-circuit yield estimations (C)	Stapper	647			
Representing knowledge with functions and Boolean arrays	Fordyce	627			
<i>Channel coding</i>					
Coding for constrained channels: A comparison of two approaches	Franaszek	602			
<i>Chip design</i>					
Architecture, design, and operating characteristics of a 12-ns CMOS functional cache chip	Matick	524			
<i>Coding theory</i>					
Statistical properties of selected recording codes	Howell	60			
Two-level coding for error control in magnetic disk storage products	Patel	470			
<i>Computer applications</i>					
Modeling and image processing for visualization of volcanic mapping	Pareschi	406			
Representing knowledge with functions and Boolean arrays	Fordyce	627			
Translating object specifications into a computer-generated three-dimensional graphic to be reproduced as a high efficiency, reflection photo-polymer hologram suitable for mass-production (C)	Molteni	178			
Two-level coding for error control in magnetic disk storage products	Patel	470			
<i>Computer performance analysis</i>					
Analysis of block-paging strategies	Tetzlaff	51			
Architecture, design, and operating characteristics of a 12-ns CMOS functional cache chip	Matick	524			
Conjugate-gradient subroutines for the IBM 3090 Vector Facility	Radicati	125			
Functional cache chip for improved system performance	Matick	15			
Lattice-gas hydrodynamics on the IBM 3090 Vector Facility	Succi	136			
<i>Condensed-matter physics</i>					
Effects of quasiperiodic (Penrose tile) symmetry on the eigenvalues and eigenfunctions of the wave equation	He	456			
<i>Disk files</i>					
Two-level coding for error control in magnetic disk storage products	Patel	470			
<i>Disk drives: Heads—mechanical analysis</i>					
The dynamics of slider bearings during contacts between slider and disk	Benson	2			
<i>Domain theory</i>					
Order in the domain structure in soft-magnetic thin-film elements: A review	van den Berg	540			

<i>Error detection and correction</i>			High- T_c superconductivity in bismuthates—How many roads lead to high T_c ?	Batlogg	208
Preserving the integrity of cyclic-redundancy checks when protected text is intentionally altered	Irvin	618	Infrared studies of the normal and superconducting states of $Y_1Ba_2Cu_3O_7$	Collins	238
Two-level coding for error control in magnetic disk storage products	Patel	470	Instability and high- T_c superconductivity	Kataoka	356
<i>Error recovery</i>			Interim report on the charge-transfer resonance model for the Cu-O superconductors	Varma	215
Two-level coding for error control in magnetic disk storage products	Patel	470	Low-field microwave absorption in single-crystal superconducting $YBa_2Cu_3O_{7-\delta}$	Blazey	324
<i>Electromagnetic interference</i>			Magnetic frustration model and superconductivity in doped planar CuO_2 systems	Aharony	287
Modeling electromagnetic interference properties of printed circuit boards	Paul	33	Measurements on thin-film high- T_c superconductors	Kapitulnik	252
<i>Fault-tolerant systems</i>			Memory effects in $YBa_2Cu_3O_{7-\delta}$ single crystal	Rossel	328
Large-area fault clusters and fault tolerance in VLSI circuits: A review	Stapper	162	Muon-spin rotation experiments in high- T_c superconductors and related materials	Keller	314
Small-area fault clusters and fault tolerance in VLSI circuits (C)	Stapper	174	NMR study of magnetism and superconductivity in high- T_c oxides	Kitaoka	277
<i>Femtosecond laser studies</i>			Nuclear magnetic resonance in high- T_c superconductors	Mehring	342
Femtosecond laser studies of the relaxation dynamics of semiconductors and large molecules	Tang	447	On the nature of high-temperature superconductivity	Emery	246
<i>Films</i>			Oxygen "disorder" and the structures of high- T_c superconductors by neutron powder diffraction	Hewat	220
Translating object specifications into a computer-generated three-dimensional graphic to be reproduced as a high efficiency, reflection photo-polymer hologram suitable for mass-production (C)	Molteni	178	Positron annihilation and high-temperature superconductivity	Peter	333
<i>Graphics</i>			Quasi-elastic and inelastic neutron-scattering studies of superconducting $La_{2-x}Sr_xCuO_4$	Birgeneau	270
Translating object specifications into a computer-generated three-dimensional graphic to be reproduced as a high efficiency, reflection photo-polymer hologram suitable for mass-production (C)	Molteni	178	Short-coherence-length superconductors	Deutscher	293
<i>High-performance cache chips</i>			Tl-Ca-Ba-Cu-O superconducting oxides	Beyers	228
Architecture, design, and operating characteristics of a 12-ns CMOS functional cache chip	Matick	524	<i>Image processing</i>		
<i>High-temperature superconductivity</i>			Modeling and image processing for visualization of volcanic mapping	Pareschi	406
A new structural modification of superconducting $La_{2-x}M_xCuO_4$	Axe	382	<i>Information theory</i>		
A review of elastic properties of high- T_c superconductors and some related C_p results	Fossheim	365	Coding for constrained channels: A comparison of two approaches	Franaszek	602
Critical current measurements in single crystals and single-grain boundaries in $YBa_2Cu_3O_7$ films	Chaudhari	299	<i>Integrated-circuit chip problem</i>		
Critical temperature and the Ginzberg-Landau theory on layered high-temperature superconductors	Schneider	351	Fault-simulation programs for integrated-circuit yield estimations (C)	Stapper	647
Current understanding of electronic structure and some difficulties with cuprate semiconductors	Kitazawa	201	Large-area fault clusters and fault tolerance in VLSI circuits: A review	Stapper	162
Electronic structure studies of high- T_c superconductors by high-energy spectroscopies	Fink	372	Small-area fault clusters and fault tolerance in VLSI circuits (C)	Stapper	174
Energy dependence of the Andreev reflection of $YBa_2Cu_3O_{7-\delta}$	van Kempen	389	<i>Integrated-circuit design</i>		
Glassy behavior of high- T_c superconductors	Morgenstern	307	Architecture, design, and operating characteristics of a 12-ns CMOS functional cache chip	Matick	524
Granular Josephson and quantum interference effects in HTC ceramic superconductors	Gough	262	<i>Local area networks</i>		
			Dependability evaluation of a class of multi-loop topologies for local area networks	Smith	511
			Preserving the integrity of cyclic-redundancy checks when protected text is intentionally altered	Irvin	618

<i>Logic circuit testing</i>				<i>Paging</i>		
A method for generating weighted random test patterns	Waicukauski	149		Analysis of block-paging strategies	Tetzlaff	51
<i>M-dimensional time series</i>				<i>Performance measurement and prediction</i>		
Time series in <i>M</i> dimensions:				Analysis of block-paging strategies	Tetzlaff	51
The power spectrum	Yetzer	464		<i>Printed circuit board modeling</i>		
<i>Magnetic domains in thin films</i>				Modeling electromagnetic interference properties of printed circuit boards	Paul	33
Order in the domain structure in soft-magnetic thin-film elements:				<i>Programming and programming languages</i>		
A review	van den Berg	540		Frames, semantic networks, and object-oriented programming in APL2	Alfonseca	502
<i>Materials</i>				Representing knowledge with functions and Boolean arrays	Fordyce	627
Effects of quasiperiodic (Penrose tile) symmetry on the eigenvalues and eigenfunctions of the wave equation	He	456		<i>Quasiperiodic symmetry</i>		
<i>Mathematics (applied)</i>				Effects of quasiperiodic (Penrose tile) symmetry on the eigenvalues and eigenfunctions of the wave equation	He	456
Geometric tolerancing:				<i>Reliability</i>		
I. Virtual boundary requirements	Jayaraman	90		Dependability evaluation of a class of multi-loop topologies for local area networks	Smith	511
Geometric tolerancing:				<i>Semantics of programming languages</i>		
II. Conditional tolerances	Srinivasan	105		Frames, semantic networks, and object-oriented programming in APL2	Alfonseca	502
Time series in <i>M</i> dimensions:				Representing knowledge with functions and Boolean arrays	Fordyce	627
The power spectrum	Yetzer	464		<i>Simulation</i>		
<i>Mechanical engineering</i>				Modeling and image processing for visualization of volcanic mapping	Pareschi	406
Matrix print actuator for dot band printer	Zable	609		<i>Solid modeling</i>		
<i>Memory design and technology</i>				Geometric tolerancing:		
Architecture, design, and operating characteristics of a 12-ns CMOS functional cache chip	Matick	524		I. Virtual boundary requirements	Jayaraman	90
<i>Memory management</i>				Geometric tolerancing:		
Architecture, design, and operating characteristics of a 12-ns CMOS functional cache chip	Matick	524		II. Conditional tolerances	Srinivasan	105
Functional cache chip for improved system performance	Matick	15		Natural quadrics: Projections and intersections	O'Connor	417
<i>Models and modeling</i>				<i>Statistics</i>		
Modeling and image processing for visualization of volcanic mapping	Pareschi	406		Statistical properties of selected recording codes	Howell	60
Translating object specifications into a computer-generated three-dimensional graphic to be reproduced as a high efficiency, reflection photo-polymer hologram suitable for mass-production (C)	Molteni	178		<i>System memory performance</i>		
<i>Networks</i>				Functional cache chip for improved system performance	Matick	15
Dependability evaluation of a class of multi-loop topologies for local area networks	Smith	511		<i>Telecommunications</i>		
Preserving the integrity of cyclic-redundancy checks when protected text is intentionally altered	Irvin	618		Preserving the integrity of cyclic-redundancy checks when protected text is intentionally altered	Irvin	618
<i>Nonequilibrium carriers in GaAs</i>				<i>Superconductivity</i>		
Femtosecond laser studies of the relaxation dynamics of semiconductors and large molecules	Tang	447		A new structural modification of superconducting $\text{La}_{2-x}\text{M}_x\text{CuO}_4$	Axe	382
<i>Object-oriented programming</i>				A review of elastic properties of high- T_c superconductors and some related C_p results	Fossheim	365
Frames, semantic networks, and object-oriented programming in APL2	Alfonseca	502		Critical current measurements in single crystals and single-grain boundaries in $\text{YBa}_2\text{Cu}_3\text{O}_7$ films	Chaudhari	299
<i>Optical spectroscopy</i>				Critical temperature and the Ginzberg-Landau theory on layered high-temperature superconductors	Schneider	351
Femtosecond laser studies of the relaxation dynamics of semiconductors and large molecules	Tang	447				

Current understanding of electronic structure and some difficulties with cuprate semiconductors	Kitazawa	201	<i>VLSI design</i> Architecture, design, and operating characteristics of a 12-ns CMOS functional cache chip	Matick	524
Electronic structure studies of high- T_c superconductors by high-energy spectroscopies	Fink	372	<i>Weighted random-pattern testing</i> A method for generating weighted random test patterns	Waicukauski	149
Energy dependence of the Andreev reflection of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$	van Kempen	389			
Glassy behavior of high- T_c superconductors	Morgenstern	307			
Granular Josephson and quantum interference effects in HTC ceramic superconductors	Gough	262			
High- T_c superconductivity in bismuthates—How many roads lead to high T_c ?	Batlogg	208			
Infrared studies of the normal and superconducting states of $\text{Y}_1\text{Ba}_2\text{Cu}_3\text{O}_7$	Collins	238			
Instability and high- T_c superconductivity	Kataoka	356			
Interim report on the charge-transfer resonance model for the Cu-O superconductors	Varma	215			
Low-field microwave absorption in single-crystal superconducting $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$	Blazey	324			
Magnetic frustration model and superconductivity in doped planar CuO_2 systems	Aharony	287			
Measurements on thin-film high- T_c superconductors	Kapitulnik	252			
Memory effects in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ single crystal	Rossel	328			
Muon-spin rotation experiments in high- T_c superconductors and related materials	Keller	314			
NMR study of magnetism and superconductivity in high- T_c oxides	Kitaoka	277			
Nuclear magnetic resonance in high- T_c superconductors	Mehring	342			
On the nature of high-temperature superconductivity	Emery	246			
Oxygen "disorder" and the structures of high- T_c superconductors by neutron powder diffraction	Hewat	220			
Positron annihilation and high-temperature superconductivity	Peter	333			
Quasi-elastic and inelastic neutron-scattering studies of superconducting $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$	Birgeneau	270			
Short-coherence-length superconductors	Deutscher	293			
Tl-Ca-Ba-Cu-O superconducting oxides	Beyers	228			
<i>Thin magnetic films</i>					
Order in the domain structure in soft-magnetic thin-film elements: A review	van den Berg	540			
<i>Vector processing</i>					
Conjugate-gradient subroutines for the IBM 3090 Vector Facility	Radicati	125			
Lattice-gas hydrodynamics on the IBM 3090 Vector Facility	Succi	136			
<i>Virtual machine facilities</i>					
Analysis of block-paging strategies	Tetzlaff	51			